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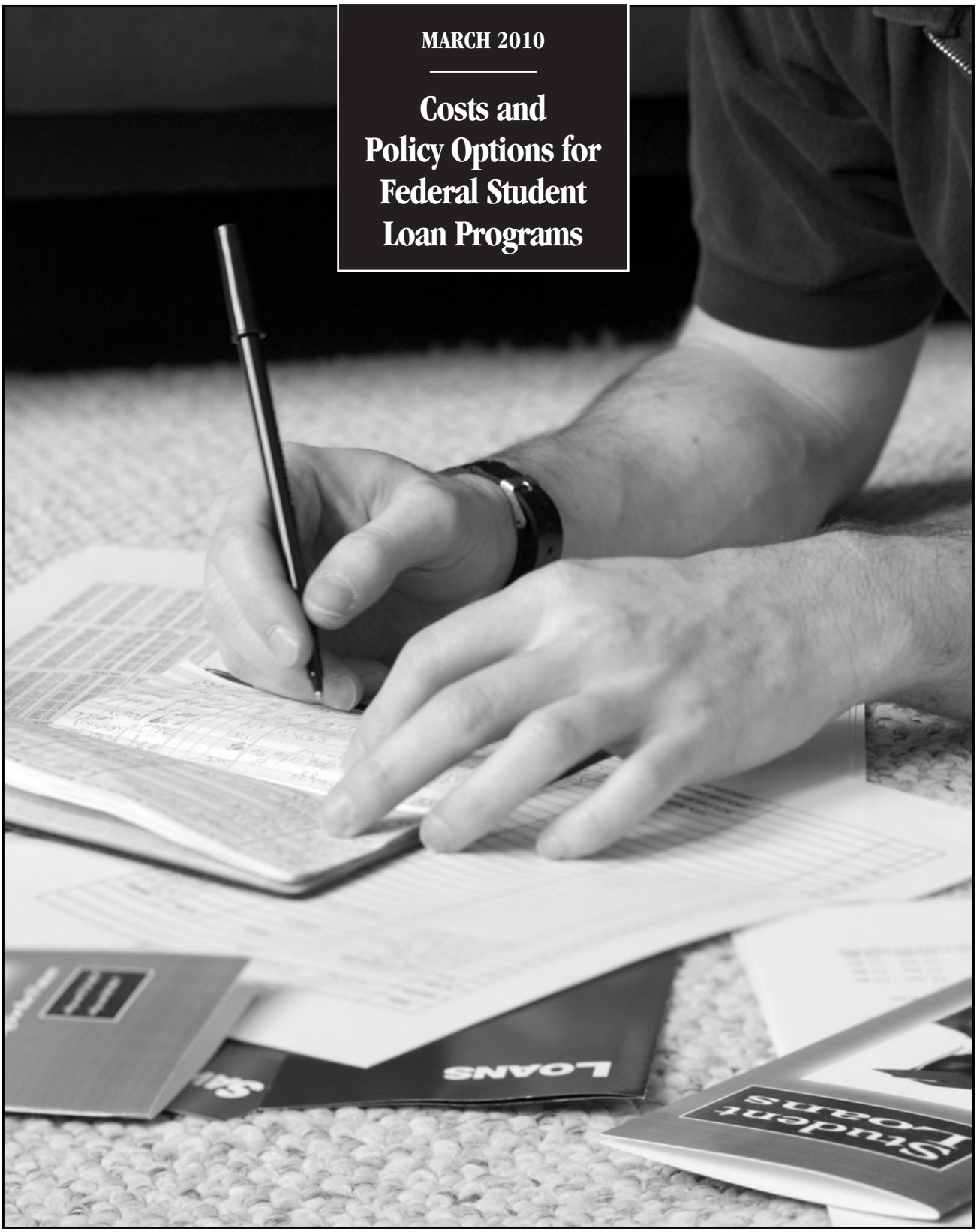
Costs and Policy Options for Federal Student Loan Programs



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The Congress of the United States ■ Congressional Budget Office

Notes

Unless otherwise indicated, the years referred to in this study are federal fiscal years (which run from October 1 to September 30). In several instances, statistics are given for calendar years or for academic years (which run from July 1 to June 30). Federal laws and regulations governing higher education frequently refer to academic years.

Numbers in the text and tables may not add up to totals because of rounding.

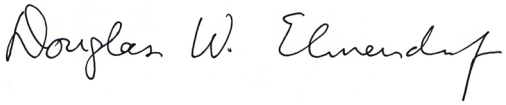
Preface

The federal government helps students finance higher education through two major loan programs—one that guarantees loans made by private lenders and one that makes loans directly to borrowers. The two programs offer similar types of loans on similar terms to borrowers, but they differ significantly in how they are funded and administered. Those differences cause the guaranteed loan program to have a significantly higher rate of federal subsidies—as calculated for the federal budget under the rules of the Federal Credit Reform Act—than the direct loan program has. However, such subsidy-rate estimates do not include the costs to taxpayers that stem from the risks involved in making student loans, nor do they include federal administrative costs (which are recorded separately in the budget). More-comprehensive, fair-value estimates, which include such costs, indicate higher subsidy rates for both programs, although direct loans continue to show a marked cost advantage over guaranteed loans.

This Congressional Budget Office (CBO) study—prepared at the request of the Ranking Member of the Senate Budget Committee—compares the budgetary and fair-value costs of the federal student loan programs. It also looks at several options for modifying those programs, including eliminating the guaranteed loan program after July 1, 2010, and expanding direct lending. In keeping with CBO's mandate to provide objective and impartial analysis, this report makes no recommendations.

The study was written by Deborah Lucas, CBO's Associate Director for Financial Analysis, and by Damien Moore of CBO's Macroeconomic Analysis Division, under the direction of Robert Dennis and Kim Kowalewski. Deborah Kalcevic of CBO's Budget Analysis Division produced some of the cost estimates, under the direction of Peter Fontaine and Sam Papenfuss. Justin Humphrey provided helpful comments on earlier drafts, as did Janice Eberly of the Kellogg School of Management at Northwestern University. (The assistance of an external participant implies no responsibility for the final product, which rests solely with CBO.)

Chris Howlett edited the manuscript. Maureen Costantino prepared the report for publication, with assistance from Jeanine Rees, and produced the cover. Monte Ruffin produced the printed copies, Linda Schimmel coordinated the print distribution, and Simone Thomas prepared the electronic versions for CBO's Web site (www.cbo.gov).



Douglas W. Elmendorf
Director

March 2010

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Summary

The federal government makes financing for higher education widely available through two programs: the Federal Family Education Loan (FFEL) program, which guarantees loans made by private lenders, and the William D. Ford Federal Direct Loan Program (FDLP), which makes loans directly to borrowers. The two programs are similar in many respects. By statute, they offer a similar variety of loans with comparable interest rates and repayment options for all qualifying borrowers. Those loan terms are usually more generous than what would be available from private sources. Schools, which choose which program to participate in, play an important role in administering the loan application process and in counseling students about the financing options available to them. In both programs, the federal government bears almost all of the losses when borrowers default.

The FFEL program and the FDLP differ, however, in the ways in which they are administered and funded. In the guaranteed loan program, loans are administered by financial institutions—such as Sallie Mae, commercial banks, and nonprofit agencies—that act as FFEL lenders.[1] Those lenders usually raise the money to make loans in the private capital markets. By contrast, in the direct loan program, the Department of Education and its contractors manage most administrative functions, and loans are funded through the Treasury.

Lending through the federal student loan programs has grown rapidly over time, with that growth accelerating in the past decade. Between 2000 and 2009, the volume of outstanding federal student loans more than quadrupled, from about $149 billion to about $630 billion. During that period, about three-quarters of the student loans made each year were originated in the guaranteed loan program.

Private lenders in the guaranteed loan program faced a sharp increase in funding costs during the recent financial crisis, leading to concerns about the future availability of guaranteed loans. To ensure an uninterrupted flow of credit for students, lawmakers enacted legislation in 2008 that gave the Department of Education temporary authority to buy newly originated loans from FFEL lenders. Through a combination of those purchases and direct loans, about 88 percent of the total dollar amount of federal student loans made in the 2008–2009 academic year was funded by the government (see Summary Box 1). Despite the new legislation, the guaranteed loan program's share of origination volume fell to 69 percent in the 2008–2009 academic year. Since then, uncertainties about funding for the FFEL program and about possible legislation affecting it have led more schools to switch to the direct loan program. The Congressional Budget Office (CBO) projected in its March 2010 baseline that, under current law, the share of guaranteed student loans would continue to decline gradually for the next few years before leveling off at 40 percent starting in 2013.

Budgetary Costs of Direct and Guaranteed Student Loans

Despite the many similarities between the FDLP and the FFEL program, the latter is significantly more costly for the federal budget. For example, CBO recently estimated that the President's proposal to eliminate the FFEL program and replace it with additional direct lending would save the government a total of $62 billion between 2010

1. Sallie Mae was originally a government-sponsored enterprise chartered by the Congress to provide liquidity to the secondary market for student loans (the market in which loans are bought and sold). It is now a private company that specializes in providing financial services to students, including FFEL and private student loans.

Summary Box 1.

Effects of the Financial Crisis

In the wake of the financial crisis that began in August 2007, investors became wary of buying asset-backed securities—even those backed by obligations with a federal guarantee, such as guaranteed student loans.[1] Many lenders in the Federal Family Education Loan (FFEL) program that had relied heavily on the sale of asset-backed securities to finance new guaranteed loans faced much higher funding costs, which the fixed statutory payments from the Department of Education were insufficient to cover. Because the FFEL program provided nearly 75 percent of federal student loans at that time, the prospect that lenders would stop making new loans threatened to seriously disrupt the availability of credit for higher education.

Lawmakers responded by passing the Ensuring Continued Access to Student Loans Act of 2008 (ECASLA).[2] That law authorized the Department of Education to provide funding to FFEL lenders, primarily by purchasing their loans but also by providing them with backup lines of credit. Between the initiatives in ECASLA and the direct student loan program, the federal government ended up financing about 88 percent (by dollar volume) of the federal student loans made in the 2008–2009 academic year.

ECASLA's effect on the federal budget has been to lower the cost of the student loan programs. Purchasing guaranteed loans allows the Department of Education to avoid some of the payments it would have made to FFEL lenders. Once the loans are purchased, payments from the government to FFEL lenders cease, and the loans are serviced and administered by the department's contractors. Thus, the purchased loans have the same costs as direct student loans.

Despite improvements in the financial markets last year, FFEL lenders continued to rely heavily on the enhanced federal support to obtain financing for student loans. Concerns about the availability of private capital led lawmakers to extend ECASLA to cover loans made for the 2009–2010 academic year.[3]

The federal government has also provided support to the private student loan market by allowing lenders to borrow from the Federal Reserve's Term Asset-Backed Securities Loan Facility (TALF).[4] Before the financial crisis, the private loan market was an important source of financing for higher education for some students (such as those who had exhausted the dollar limits on federal student loans or who did not qualify for federal loans). During the crisis, many lenders suspended or discontinued their private student loan programs because of the sharp increase in funding costs and worries about the deteriorating credit quality of borrowers. Although some activity has resumed in that market, the terms offered to borrowers on private student loans have remained stringent, and lenders have relied on federal backing through the TALF to obtain funding at affordable rates.

1. Asset-backed securities are financial instruments whose interest and principal payments stem solely from the income generated by the assets that serve as collateral for the securities. Securities backed by student loans are created by bundling those loans together and selling investors claims to a portion of the loans' cash flows. In the case of federally guaranteed student loans, the securities are structured so that federal payments for default claims on the loans are passed along to the holders of the securities.
2. Public Law 110-227.
3. The Department of Education reports that under the authority in ECASLA, it purchased roughly $50 billion in FFEL loans through the end of fiscal year 2009. The department estimates that it will buy another $62 billion in loans under the extended authority that ends on July 1, 2010, for total purchases of about $112 billion.
4. The Federal Reserve created the TALF in November 2008 to provide liquidity for certain types of asset-backed securities, including those backed by student loans. Issuers of asset-backed securities can borrow from the facility at interest rates set by the Federal Reserve, using asset-backed securities as collateral. The TALF is scheduled to stop operating later this year.

and 2020.[2] Although the federal cost per dollar of student loans originated varies from year to year and among different types of loans, a loan made in the FFEL program consistently shows a much higher budgetary cost than if it had been made in the direct loan program.

The budgetary costs of the direct and guaranteed loan programs are recorded in the federal budget using the standard procedure specified in the Federal Credit Reform Act of 1990 (FCRA).[3] That law says that the costs of a federal loan or loan guarantee should be estimated in the year the loan is disbursed as the net present value of the federal government's expected net cash flows over the life of the loan or guarantee. Those cash flows are discounted to their present value using the Treasury's borrowing rates.[4]

Fair-Value Costs of Direct and Guaranteed Student Loans

Cost estimates made under FCRA do not provide a comprehensive measure of the cost to taxpayers of the federal student loan programs, for two main reasons. First, the FCRA methodology does not include the costs to taxpayers that stem from certain risks involved in lending—risks that private investors would require compensation to bear. In particular, although the FCRA methodology accounts for average losses from defaults, it does not recognize a cost for the risk that losses from defaults will be higher during periods of market stress, when resources are scarce and hence most valuable. Such "market risk" is excluded from FCRA estimates because that methodology discounts expected future cash flows at Treasury borrowing rates rather than at higher interest rates that incorporate the price of risk.[5] Second, FCRA estimates do not include administrative expenses, which are recorded separately in the budget each year on a cash basis (that is, undiscounted). That treatment mixes together current-year administrative costs for outstanding loans and for newly originated loans.

In this study, CBO compares the costs of making a loan in the FDLP and guaranteeing a loan in the FFEL program, calculated as specified in FCRA and also at fair value—a broader measure that includes administrative costs and the cost of risk. The fair value of an asset or liability corresponds to its market value under normal market conditions (or, in the absence of such conditions, to an approximation of what the value would be under those conditions). In general, a fair-value subsidy occurs whenever the government accepts terms on the financing or services it provides that are less stringent than the terms that participants in private markets would require for taking on comparable obligations and risks.

Taking into account the costs of risk and administration has the effect of significantly increasing the estimated cost of both the direct and guaranteed loan programs; it also narrows—but does not eliminate—the cost difference between the two programs. For instance, CBO recently estimated that whereas loans issued in the direct loan program between 2010 and 2020 would reduce the deficit by a total of $68 billion under FCRA accounting, those loans would increase the deficit by $52 billion on a fair-value basis.[6] For loans issued in the FFEL program, the projected cost over that period increases from $22 billion under FCRA accounting to $105 billion on a fair-value basis. The savings from implementing the President's proposal to replace FFEL loans with direct loans decline from a total of $62 billion over the 2010–2020 period under FCRA accounting to $40 billion on a fair-value basis.

2. Those savings stem from a $68 billion reduction in subsidy costs (which do not include the government's administrative expenses), partly offset by a $6 billion increase in administrative expenses, which are funded separately in annual appropriation acts. See Congressional Budget Office, letter to the Honorable Judd Gregg about the budgetary impact of the President's proposal to alter federal student loan programs (March 15, 2010).

3. CBO's method for estimating those costs is described in Congressional Budget Office, *Subsidy Estimates for Guaranteed and Direct Student Loans* (November 2005).

4. Net present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (the discount rate) used in the calculation.

5. Student loans also entail prepayment risk: the risk that students will pay back loans more rapidly if future interest rates fall and more slowly if future rates rise, reducing the value of the government's claims. That risk, however, is less important than market risk for student loans. Investors in securities backed by student loans also assign a price to other types of risk, such as liquidity risk (the risk that the securities may not be easy to sell quickly without having to offer a price concession). CBO takes into account all of those risks in its fair-value estimates.

6. Congressional Budget Office, letter to the Honorable Judd Gregg about the budgetary impact of the President's proposal to alter federal student loan programs (March 15, 2010).

To calculate fair-value subsidies, CBO generally used the same assumptions as for its FCRA estimates, except with regard to discount rates and administrative costs. In place of Treasury rates, CBO used discount rates that included an estimate of the risk premium (the additional return in excess of Treasury rates) that private investors would require to bear the risks of student loans. CBO estimated those discount rates on the basis of interest rates on private student loans and other data from the private student loan market.[7] The estimated discount rates also took into account differences between private and federal student loans (in the terms of the loans and the characteristics of borrowers); past and present market conditions; and the expectation that conditions in financial markets will improve in the next several years. In addition, CBO included the administrative costs incurred by federal agencies in its fair-value subsidy estimates, because a private entity would need to be compensated to bear those costs.

Subsidy rates—the cost per dollar of loan originated—vary from year to year with the composition of borrowers in each program and the mix of loan types. To present FCRA and fair-value estimates that are informative about the differences in the cost of lending under the two student loan programs, this study shows subsidy rates that are based on a representative loan (holding the characteristics of borrowers and the mix of loans fixed) made in the FFEL program in specified time periods.

CBO's calculations indicate that if subsidies were computed on a fair-value basis, student loans made in both the direct and guaranteed loan programs would impose costs on the federal government, and those costs would represent a significant share of the principal value of the loans issued. For instance, whereas on average over the 2010–2020 period a representative loan issued in the direct loan program has a *negative* subsidy rate of 9 percent under FCRA (meaning that it reduces the deficit), the same loan has a *positive* subsidy rate of 12 percent on a fair-value basis. For the FFEL program, the average subsidy rate on a representative loan over that period is 5 percent under FCRA and 20 percent on a fair-value basis.

Thus, measuring costs on a fair-value basis narrows the difference between the costs of loans made in the guaranteed and direct lending programs, but it does not eliminate the gap. CBO estimates that if a representative guaranteed loan made during the 2010–2020 period was instead originated in the direct loan program, the savings in subsidy rates would be 8 percentage points (20 minus 12) on a fair-value basis, compared with about 13 percentage points (5 minus -9, with rounding) under FCRA accounting.

Those estimates, which are based on the economic assumptions underlying CBO's March 2010 baseline, are very sensitive to projections of interest rates and estimates of discount rates. However, the conclusions that fair-value subsidy rates are positive for both programs and higher for the guaranteed loan program hold under a broad range of assumptions about interest rates, discount rates, and other market conditions.[8]

The higher costs in the guaranteed loan program (on both a FCRA and a fair-value basis) result mainly from the way in which the government compensates FFEL lenders. Payments to those lenders are fixed in legislation rather than set through a mechanism—such as a competitive bidding process—that ties reimbursement to actual costs incurred. In general, those statutory payments appear to exceed lenders' basic administrative costs and their funding costs under normal market conditions (although during the financial crisis, the payments proved too low to cover the surge in lenders' borrowing costs).[9] Because FFEL lenders must compete to attract borrowers, any difference between the statutory payments they receive and their basic costs is mostly absorbed by increasing marketing efforts, enhancing the administrative services they provide, or offering other benefits to schools

7. Many of the lenders that make guaranteed student loans also offer private student loans. Private loans are generally taken out by students at expensive undergraduate institutions or professional schools who have reached the dollar limit on federally guaranteed loans or by students who do not qualify for federal loans.

8. The conclusion that costs are higher for both programs on a fair-value basis is a logical consequence of including costs that are excluded under FCRA; only the size of the effect depends on specific assumptions. The amount by which the FFEL program appears more expensive than direct lending is sensitive to the rate chosen to discount the government's payments to FFEL lenders. With a sufficiently high—but unrealistic—discount rate, the FFEL program would appear to be less expensive than the direct loan program.

9. The College Cost Reduction and Access Act of 2007 (Public Law 110-84) reduced payment rates to FFEL lenders and guaranty agencies, which narrowed the difference in costs between the two programs. But in CBO's estimation, a considerable cost difference remains.

and students. Thus, competition between lenders benefits schools and borrowers rather than lowering costs to the government. In addition, FFEL lenders fund their loans in the capital markets, which introduces additional costs and risks to the program that do not arise when loans are funded through the Treasury.

Options for Changing Federal Student Loans

In recent years, many proposals have been made to modify the federal student loan programs. Some of those proposals focus on the cost disparity between the guaranteed and direct lending programs. For example, the President's 2011 budget calls for ending the FFEL program's authority to guarantee new loans on July 1, 2010, and switching entirely to the direct lending program to realize the savings from that program's lower costs. The House of Representatives recently passed legislation (H.R. 4872, the Health Care and Education Affordability Reconciliation Act of 2010) to carry out a similar change, and the Senate is currently considering that legislation.[10]

Policy options that could help bring the subsidy rate of the FFEL program closer to that of the direct loan program include having the government buy all student loans from FFEL lenders shortly after origination but allowing the lenders to retain their current administrative functions; cutting payments to those lenders; and auctioning off the right to lend under the program. Such cost-saving measures would probably cause FFEL lenders to reduce service levels, prompting more schools to switch to the direct loan program.

10. On September 17, 2009, the House passed the Student Aid and Fiscal Responsibility Act of 2009 (H.R. 3221), which would also phase out the FFEL program.

Federal costs could be made more predictable—and the subsidies provided to different cohorts of students could be made more uniform—by indexing the interest rates on student loans to market interest rates. Under current law, subsidies vary considerably from year to year because the interest rates charged to borrowers are fixed by statute and unrelated to market interest rates.

Other options to alter the student loan programs aim to address policy goals—such as improving the affordability and availability of student loans or reducing defaults—by modifying the terms offered to borrowers. For example, one way to help students would be to lower the interest rates charged on federal student loans. However, broad-based reductions in interest rates would entail significant costs to the government. For instance, reducing the scheduled interest rates charged to borrowers on new loans by 1 percentage point would increase the subsidy rate on guaranteed loans by 6 percentage points on a fair-value basis.

Policymakers have also considered changes aimed at lessening the hardships that borrowers face in repaying federal student loans. Those proposed changes include expanding options that make repayment terms contingent on income, that eliminate a portion of an outstanding loan (forgiveness), or that allow a borrower to delay repayment (forbearance or deferment). Although more-lenient repayment terms may lower default rates, they increase costs to the federal government by lengthening the average time that loans are outstanding at subsidized interest rates. The costs of income-contingent repayment, or of loan forgiveness or forbearance, are generally higher on a fair-value basis than under FCRA accounting, because borrowers are more likely to take advantage of those opportunities in economic downturns, when the value of the forgone payments is greatest.

Costs and Policy Options for Federal Student Loan Programs

The Department of Education oversees various programs to help students pay for the costs of postsecondary education. This Congressional Budget Office (CBO) study focuses on the two largest student loan programs created under the authority of the Higher Education Act of 1965 (as amended):

- The Federal Family Education Loan (FFEL) program, which dates back to the mid-1960s, guarantees student loans made by private-sector lenders.
- The William D. Ford Federal Direct Loan Program (FDLP), which began operating in 1994, makes loans directly to students or their parents.

Overview of Federal Student Loan Programs

Both the guaranteed and direct loan programs have experienced rapid growth as increasing numbers of students have sought higher education and as the costs of school attendance have soared. The two programs offer virtually identical types of loans, which carry similar interest rates, repayment options, and other terms. However, significant differences exist in the way the programs are administered and funded, which have implications for their costs to the federal government.

Types of Loans

The FDLP and the FFEL program offer many kinds of loans. Eligibility and some loan terms depend on a student's course of study (for example, undergraduate, graduate, or medical); the identity of the borrower (student or parent); and whether the student qualifies for more favorable loan terms on the basis of need.

Both programs offer so-called Stafford loans to undergraduate and graduate students. Those loans make up the bulk of federal student loans, accounting for more than 80 percent of new loan volume each year (excluding consolidation loans). In a typical year, a little over half of Stafford loans (by volume) are "unsubsidized" and the rest are "subsidized." Those labels refer to the terms of the loans, not to whether the federal government incurs subsidy costs for the programs. With subsidized Stafford loans—which are available depending on the income and assets of students and their parents—borrowers generally are not charged interest while they are in school and during certain other periods, and undergraduate borrowers are charged lower interest in some years.

Besides Stafford loans, both the FDLP and the FFEL program offer so-called PLUS loans to parents of undergraduate students and to graduate and professional students who have reached their borrowing limits for Stafford loans. In addition, both programs offer consolidation loans, which allow most borrowers with more than one outstanding federal loan to refinance them into a single obligation.[1]

Loan Terms

The terms offered to borrowers—interest rates, borrowing limits, fees, and repayment options—are set by statute and are almost identical under the direct and guaranteed loan programs. Since July 2006, new Stafford loans

1. Consolidation loans offer extended repayment terms and a fixed interest rate equal to the weighted average of interest rates on the loans being consolidated (rounded up to the nearest eighth of a percentage point). For more about consolidation loans, see Congressional Budget Office, *The Cost of the Consolidation Option for Student Loans* (May 2006). For budgetary purposes, CBO treats a consolidation loan as an extension of the original loan rather than as a new loan. Thus, the subsidy estimates in this analysis, both budgetary and fair-value estimates, include the incremental costs of loan consolidation.

have carried a fixed interest rate.[2] (Loans originated earlier carry a variable rate that is indexed to the interest rate on three-month Treasury bills.) Setting a fixed interest rate that is not linked to a market rate has several effects: It causes the rate of federal subsidies provided to different cohorts of students to vary considerably, and it makes the budgetary costs of student loan programs more variable from year to year.

Statutory restrictions limit the amount of money that can be borrowed—both annually and cumulatively—from the federal lending programs. The limits, which are identical under the two programs, depend on the type of loan, the course of study, and the costs of attending a given school.[3]

Although interest rates and borrowing limits are almost identical for direct and guaranteed loans, the fees that borrowers pay to take out a student loan vary slightly between the two programs.[4] For guaranteed loans, the government charges borrowers a fee equal to 1 percent of the loan amount when their loan is disbursed. That origination fee goes toward paying claims to FFEL lenders when borrowers default. The government also charges a 1 percent origination fee on direct loans, but part of the fee is returned to students if they repay their loan on time (the rest is remitted to the Treasury). Thus, the average amount that students pay in origination fees is lower on direct loans.

When students complete or withdraw from a course of study, they typically receive a six-month grace period during which no loan payments are due, although interest continues to accrue on their loans. (With subsidized loans, no interest accrues during the grace period.)

Stafford loans have flexible repayment plans that last up to 30 years; they also have deferment and forbearance provisions that allow borrowers to temporarily stop making payments because of financial hardship, a return to school, or other reasons.[5] For qualifying student borrowers, several repayment plans are available in which scheduled loan payments vary with the borrower's income.[6]

Federal student loans are considered to be in default after 270 days of missed payments—a much less stringent criterion than applies to private student loans and other consumer credit. However, student loans of any sort (direct, guaranteed, or private) are rarely forgiven in bankruptcy proceedings, and there is no statute of limitations on their collection.

Loan Volume

The demand for federal student loans has risen rapidly in recent decades, aided by a series of legislative changes that expanded the federal programs and relaxed limits on the amounts borrowed.[7] Between 1990 and 2009, the total dollar volume of new loans originated each year grew at an average rate of roughly 9 percent. In the past five years alone, new originations increased by nearly three-quarters: from $56 billion in 2005 to $97 billion in 2009 (see Table 1). As a consequence, the total amount of federal student loans outstanding rose from $381 billion to

2. That rate was initially set at 6.8 percent for both subsidized and unsubsidized Stafford loans. For subsidized loans to undergraduates, however, the rate follows a declining schedule: 6.0 percent in the 2008–2009 academic year, 5.6 percent in 2009–2010, 4.5 percent in 2010–2011, and 3.4 percent in 2011–2012. After that, it reverts to 6.8 percent.

3. For example, as of July 1, 2008, the cumulative limits on outstanding Stafford loans are $31,000 for loans taken out as a dependent undergraduate and a total of $138,500 for loans taken out as an undergraduate or graduate student. Limits for medical students are higher.

4. A notable exception to the similarity of interest rates between the two programs is that the fixed rate for borrowers of PLUS loans made on or after July 1, 2006, is 7.9 percent for direct loans and 8.5 percent for guaranteed loans.

5. During a deferment or forbearance period, payments are not required but interest still accrues. (In the case of subsidized Stafford loans, the government pays the interest during deferment.)

6. Three different plans exist: "income-based repayment," "income-sensitive repayment," and "income-contingent repayment," all of which have slightly different rules. For instance, under income-based repayment, monthly payments are capped at a percentage of the borrower's discretionary income; the cap is based on the borrower's income and family size. Single borrowers who earn less than $50,000, and married borrowers with two children who earn less than $100,000, have their monthly payments capped at less than 10 percent of their gross income. For a description of the various plans, see FinAid, "Income-Based Repayment," available at www.finaid.org/loans/ibr.phtml.

7. For example, the unsubsidized Stafford loan program, established in 1992, extended eligibility to higher-income borrowers by removing an income test, and the volume of those loans grew rapidly. Starting in 2006, the PLUS loan program increased the availability of federal loans to graduate students; that program has also grown quickly. Borrowing limits, both annual and cumulative, have been raised several times since 1995. On PLUS loans, for instance, changes allowed for borrowing up to the full cost of a student's education.

Table 1.

New Direct and Guaranteed Student Loans, by Fiscal Year

	2005	2006	2007	2008	2009
			Volume of New Loans (Billions of dollars)		
Direct Loans	12.6	12.2	12.5	17.8	29.7
Guaranteed Loans	43.2	46.7	51.8	57.9	66.8
Total	**55.8**	**58.8**	**64.4**	**75.7**	**96.5**
			Number of New Loans (Millions)		
Direct Loans	3.0	2.8	2.7	3.7	6.1
Guaranteed Loans	10.3	10.8	11.6	12.7	14.5
Total	**13.3**	**13.7**	**14.3**	**16.5**	**20.6**

Source: Congressional Budget Office based on data from the Department of Education.

Note: These numbers reflect net commitments, excluding consolidation loans.

$631 billion over that period. Approximately two-thirds of the growth in the FDLP and the FFEL program has resulted from a rise in the number of borrowers, and one-third has stemmed from larger loan balances per borrower during the 1995–2009 period. The increasing demand for student loans has coincided with extraordinary growth in the cost of higher education—which, since the 1980s, has reportedly risen at an annual rate that was 3 percentage points higher than the general increase in prices.[8]

Historically, the guaranteed loan program has been the main source of federal credit assistance for higher education. It accounted for an average of about 75 percent of the total dollar amount of federal student loans originated between 1998 and 2008. That program's share fell from 81 percent in 2008 to 69 percent in 2009, as some schools switched to the direct loan program to avoid uncertainties about the availability of guaranteed student loans during the financial crisis (see Summary Box 1 on page viii). Furthermore, the government financed a large percentage of the guaranteed loans originated in 2009 through loan purchases by the Department of Education. Since then, the number of schools participating in the FFEL program has continued to decline. CBO projects that under current law, guaranteed loans will account for 55 percent of all new federal student loans in 2010 and smaller shares thereafter, leveling off at about 40 percent beginning in 2013.

Some students who have exhausted their eligibility or who do not qualify for federal loans turn to the private student loan market for financing. Private student loans are offered by many of the same lenders that participate in the FFEL program. But whereas the federal government determines eligibility and loan terms for federal direct and guaranteed student loans, and assumes the risk of default, lenders play those roles for private loans. Data on the size of the private student loan market are scarce, but one estimate put originations at about $22 billion in the 2007–2008 academic year—implying that the private market was about one-quarter the size (by dollar value) of the market for federal student lending in that period.[9] The volume of the private student loan market appears to have fallen off sharply in the wake of the financial crisis.

Administration and Funding

The direct and guaranteed student loan programs differ in how they are administered and funded and in how the government pays for administration and funding. In the guaranteed loan program, the federal government guarantees loans that are administered and funded by FFEL lenders, including private financial institutions and nonprofit organizations. FFEL lenders are compensated for those activities on terms set by statute under the Higher Education Act. In the direct loan program, by contrast, the Department of Education makes loans directly to

8. College Board, *Trends in College Pricing, 2009* (Washington, D.C.: College Board, 2009).

9. Mark Kantrowitz, "Characteristics of Private Student Loan Borrowers Who Do Not Use Federal Education Loans" (published by FinAid.org, June 7, 2009), www.finaid.org/educators/20090607private_vs_federal_loans.pdf.

qualifying borrowers and manages all aspects of the lending process. It hires private contractors, selected in a competitive bidding process, to perform some administrative functions, and it funds loans through the Treasury.

Schools play an important role in both programs in administering the loan application process and counseling students about the financing options available to them. Schools also must decide which program to participate in. When choosing between the direct and guaranteed loan programs, schools consider such factors as which program provides better administrative and other services and which program seems more beneficial to their students.

Factors That Affect the Costs of Direct and Guaranteed Lending

The FDLP and the FFEL program differ markedly in their costs to the federal government. The main reason is that payments to FFEL lenders are set legislatively at an average amount that is higher than the costs to the FDLP of administering and funding direct loans. Those additional payments to lenders accommodate the higher marketing and funding costs of the guaranteed loan program and the higher level of services that it offers to schools and students.

Payments to Lenders

The way the government compensates lenders under the FFEL program is set by statute and is only weakly related to the actual costs that lenders incur. Lenders receive regular quarterly payments from the government—known as special allowance payments (SAP)—that are a percentage of the principal value of their outstanding guaranteed loans. That percentage equals the prevailing interest rate on high-quality three-month commercial paper plus an additional amount—called a spread—minus the interest rate that borrowers contractually pay on the loans.[10] That arrangement effectively transfers to the government the interest payments that lenders receive from borrowers. In return, the commercial-paper rate plus a small portion of the spread is intended to cover lenders' normal costs of acquiring the funds to make loans in the capital market.[11] The rest of the spread goes toward covering administrative costs and other expenses incurred by lenders.[12] The statutory amount of the spread varies by type of loan and type of lender. For example, payments to for-profit FFEL lenders include a spread of 1.79 percent on Stafford and PLUS loans and 1.19 percent on consolidation loans. Spreads paid to nonprofit lenders are 0.15 percentage points higher.

Lenders also pay and receive a variety of other, relatively small, fees and payments that affect their total compensation. In addition, when borrowers default, the government pays FFEL lenders a fixed fraction—currently set at 97 percent—of the principal and accrued interest owed (see the section on collection below).[13]

In deciding whether to offer guaranteed loans, lenders weigh the value of those various payments against the costs and risks associated with participating in the FFEL program. If statutory payments to lenders fall short of covering their costs—as happened during the financial crisis before additional federal support became available—lenders have the option to stop participating. But when payments to lenders exceed the basic cost of administering and funding loans, there is no mechanism for the government to recoup the excess.

Competition among lenders means that a substantial portion of any excess payments will be used to attract and retain business, such as by spending more on marketing or improving services to students and schools. Those services include discounts to borrowers for on-time payment and support services to financial aid offices, such as software systems and educational materials.[14] (To the extent that lenders are shielded from competition, some portion

10. Commercial paper consists of unsecured promissory notes that large corporations or banks issue to raise money for short-term needs.

11. During the recent financial crisis, FFEL lenders' funding costs increased well above the commercial-paper rate, and the fixed spread did not accommodate those increases.

12. The College Cost Reduction and Access Act of 2007 (Public Law 110-84) reduced SAP spreads from previous levels. Although no major lender withdrew from the program in the following year, the level of benefits offered to borrowers declined. Lenders further cut services and benefits when the financial crisis increased their funding costs.

13. From the lender's perspective, a default terminates the stream of special allowance payments and triggers claim payments from the government. Prepayments of loans similarly terminate the stream of spread payments and result in redemption of principal from the borrower.

14. The extent of such inducements is limited by the Higher Education Act, and enforcement has increased in recent years.

Table 2.

Lending Functions in the Direct and Guaranteed Loan Programs

	Direct Loan Program	Guaranteed Loan Program
Source of Funding	Government (Through the Treasury)	Private capital markets (Through securitization and banks)
Assumption of Default Risk	Government (100 percent)	Government (97 percent)[a] Lenders (3 percent)
Origination	Government (Through schools)	Guaranteed lenders (Through schools)
Servicing	Government (Partly through subcontractors)	Guaranteed lenders (Partly through subcontractors)
Collection	Government subcontractors and Treasury Offset Program[b]	Guaranty agencies for three years, then government subcontractors and Treasury Offset Program[b]

Source: Congressional Budget Office.

a. Under current law, the government's share is set to decline to 93 percent beginning in 2013.

b. The Treasury Offset Program enables the Department of Education to collect from delinquent borrowers by having the Treasury withhold a portion of their federal transfer payments, such as tax refunds or Social Security benefits.

of any excess payments will be retained by lenders.)[15] In the direct program, by contrast, the likelihood of excess administrative payments is diminished by the practice of hiring private contractors through a competitive bidding process.

Comparison of Costs by Function

Lending involves a number of basic functions: origination, servicing, collection on loans in default, risk assumption, and funding. Identifying the differences in how those functions are carried out between the two programs (summarized in Table 2) is helpful in understanding why cost differences arise.

The comparisons below are based on the normal operations of both programs. Thus, they do not reflect the effects of the temporary provisions that lawmakers enacted in 2008 to ensure an uninterrupted supply of credit to students during the financial crisis (see Summary Box 1 on page viii).

Origination. Origination refers to all of the steps required to issue a loan, from application to final approval and disbursement of funds. Most loans in both the direct and guaranteed loan programs are originated through school financial aid offices, which many students rely on to obtain information and advice about loan products and lenders.[16] In carrying out the origination function, schools use software and other support services provided either by the Department of Education (for schools in the direct loan program) or by FFEL lenders (for schools in the guaranteed loan program). Because FFEL lenders compete with one another to attract and retain business, they incur marketing and other expenses that are avoided with direct lending. Those higher origination expenses do not directly affect federal costs because they are not reimbursed, but they do affect whether a given amount of federal payments is sufficient to induce lenders to participate in the guaranteed loan program.

Servicing. Servicing involves the administrative functions associated with billing and collecting interest and principal payments on loans that are in good standing. The government and FFEL lenders rely on many of the same private contractors to perform those functions, and the Department of Education uses a competitive auction process to select its contractors and determine payments

15. For instance, schools encourage students to borrow from a list of "preferred lenders," which thus have a competitive advantage over lenders not listed.

16. An exception is consolidation loans, which are often obtained independently of a financial aid office.

for them. Hence, servicing costs are similar under both programs.

Collection. When a loan made under either program goes into default, it is typically transferred from a regular servicer to a "special servicer" that focuses on collection and recovery. In the direct loan program, those special servicers are private contractors, which the Department of Education chooses through competitive bidding. As an incentive to increase recovery rates, compensation is structured so that contractors keep a share of the money they recover.

In the FFEL program, guaranty agencies—state or private nonprofit entities that administer the federal guarantee and provide a variety of programs and services to schools and borrowers in their state—act as the special servicers. For loans that default, guaranty agencies pay FFEL lenders the insured amount of outstanding principal and interest, using funds supplied by the Department of Education. The guaranty agency then holds and seeks to collect on the delinquent loans for up to three years, keeping a share (that is fixed by law) of any collections.[17] Although that compensation is not determined competitively, it is close to what contract special servicers in the direct loan program receive.

Guaranteed loans that remain outstanding after three years of nonpayment are transferred to the Department of Education and effectively become direct loans. The department and its contractors continue to try to collect on the loans after the transfer and remit the net amounts collected to the Treasury.

Risk Bearing. Since the criteria that determine eligibility for federal direct and guaranteed loans are identical, the two programs attract similar groups of borrowers.[18] Thus, the risks arising from the behavior of borrowers are also similar. The most significant of those risks is the risk of default. The options for borrowers to prepay a loan at any time without penalty or to seek forbearance or deferral also create risks.

Although the risks arising from defaults and prepayments, and the cost of those risks to society as a whole, are much the same for the two programs, the way they are allocated differs. In the direct loan program, the federal government—and hence taxpayers—retain all of the risk. In the guaranteed loan program, the federal government assumes most of the risk, but some of it is transferred to FFEL lenders (and to a lesser extent to the holders of securities backed by guaranteed student loans). The partial shifting of risk to FFEL lenders occurs primarily through the way they are compensated by the government, as well as through the 3 percent loss on loans that default.

Although FFEL lenders are protected by the federal guarantee from most of the losses from default, they bear risk because the government's special allowance payments to them end if a loan is prepaid or goes into default; those payments are reduced if a loan is consolidated by the same lender. When default or prepayment rates are high, lenders may not recover the administrative costs associated with making guaranteed student loans. Thus, the structure of the special allowance payments exposes lenders to market risks, and lenders require higher compensation to participate in the FFEL program because of that risk exposure.[19] The way in which guaranteed loans are funded also transfers a small amount of default and

17. Currently, guaranty agencies receive 16 percent of the recovered amounts (or 8 percent if the recovery is achieved by consolidating the loan). The Department of Education and its contractors may also collect on delinquent guaranteed loans during that three-year period.

18. Despite the similarity of borrowers, some differences in default rates exist between the programs. Default rates on consolidation loans, for example, have been significantly higher in the direct loan program than in the guaranteed loan program. Borrowers can consolidate loans under either program, and FFEL lenders can choose whom they market consolidation loans to at an individual level; therefore, it appears that FFEL lenders have been able to avoid offering consolidation loans to borrowers who are close to default. In addition, guaranty agencies have a financial incentive to rehabilitate the loans of borrowers in default by consolidating them into the direct program.

    Default rates also vary somewhat between the two programs because the programs serve different schools, which attract different groups of students (in terms of backgrounds and economic prospects). Specifically, the FFEL program serves a larger proportion of higher-risk borrowers, as evidenced by its higher default rates. Although CBO takes such differences into account in projecting the cost of each program, they are not relevant for comparisons of the structural factors that determine the cost differences between the programs. Thus, CBO holds the mix of loans constant in the subsidy estimates in this analysis.

19. The Department of Education can decline to accept default claims for loans that have not been properly serviced, which gives rise to a small amount of performance risk for lenders.

prepayment risk from lenders to the capital markets, although contracts are generally structured to minimize the exposure of investors in student-loan-backed securities to the default risk of the underlying loans.

Furthermore, the funding mechanism for guaranteed loans creates some additional risks that are absent in the direct loan program. For instance, the possibility that a lender may not properly service loans—or, more generally, that other problems will interrupt the lender's ability to make payments or cause it to forfeit the federal guarantee—is a source of risk whose costs are avoided by raising funds through the Treasury. Such risks are usually insignificant, but during the recent financial crisis, they probably contributed to the sharply higher funding costs for FFEL lenders.

Financing. The capital markets provide the funding for student loans in both the direct and guaranteed loan programs, but through different mechanisms. In the direct loan program, the government funds loans by issuing Treasury securities. In the FFEL program, lenders fund loans either on their own balance sheets (with deposits or other borrowing) or, more often, by securitizing the loans—that is, by bundling them together to create student-loan-backed securities that are sold to private investors in exchange for a claim to part of the principal and interest payments generated by the underlying loans. Those securities generally carry a variable interest rate that equals the rate on commercial paper plus a fixed spread.[20]

Because the government reimburses FFEL lenders by formula and not according to their actual funding costs, those costs do not directly affect the government's spending. Nevertheless, the government must pay FFEL lenders enough to cover their expenses in order for the program to continue, so the costs that lenders incur to obtain funding affect the extent to which the costs of the guaranteed loan program can be reduced.

Funding a student loan involves two types of costs: the administrative costs associated with obtaining funds and the rate of return that investors require to provide the funding. Securitizing student loans (or raising funds privately by other means) involves higher administrative costs than borrowing through the Treasury does. FFEL lenders that securitize loans incur administrative expenses such as fees to investment bankers to structure and market the securities, fees to the Securities and Exchange Commission, legal fees, and the ongoing costs of managing receipts and payments. The Treasury avoids some of those expenses, and because it issues a very large volume of securities, it benefits from administrative economies of scale in doing so.

The rate of return that investors require depends on the amount and types of risks associated with the claims they receive. FFEL lenders pay higher interest rates than the Treasury does to obtain funds—typically about half a percentage point more under normal economic conditions. (During the recent financial crisis, the rates that investors demanded to hold securities backed by guaranteed student loans peaked at more than 2 percentage points above the Treasury's borrowing costs.) How much of that difference represents a true cost disadvantage for the FFEL program is hard to determine. For instance, if investors in those securities assumed some of the default risk from the underlying student loans, the higher rates could be fair compensation for protecting taxpayers from that risk.

The government guarantee and the structure of student-loan-backed securities protect investors from almost all of the default risk on the underlying loans, so default risk does not seem to explain the higher cost of funds for FFEL lenders.[21] Nevertheless, investors in those securities are exposed to counterparty risk—the possibility that a lender will encounter problems that interrupt its ability to make timely payments or that it will make a servicing error that forfeits the federal guarantee. Investors also bear liquidity risk—the risk that the securities may not be easy to sell quickly without having to offer a price concession.

Several other characteristics of student-loan-backed securities also help explain why investors demand a higher

20. The mismatch between fixed-rate student loans funded with variable-rate debt does not expose FFEL lenders or investors to additional risk because the government effectively swaps fixed student loan payments from lenders for variable interest rate payments to lenders. Most of the variable interest rate payments from the government are passed on to holders of the student-loan-backed securities (the rest is kept by the lenders).

21. FFEL lenders often provide additional protection to investors by retaining a junior claim on a securitized loan pool that pays off only after other investors are repaid in full. Because the securities carry a variable rate, investors also face minimal prepayment risk.

yield on them than on Treasury securities. For example, securities backed by student loans are less liquid, and they are subject to state and local taxes (which Treasury securities are exempt from). Inferring how much those differences contribute to truly higher costs for private funding is difficult. Some of the Treasury's apparent advantages are transfers rather than gains, or they come at a cost to taxpayers. The exemption from state and local taxes has an offsetting cost to the localities that lose tax revenue. The greater liquidity of Treasury securities comes at least in part at a cost to taxpayers—liquidity is enhanced by the safety that stems from the federal power to transfer risk from investors to taxpayers. The scale of Treasury borrowing also contributes to liquidity, but the ability to borrow on so large a scale may also depend on the transfer of risk to taxpayers.

Other characteristics that cause investors to demand a higher return on student-loan-backed securities probably reflect inefficiencies in funding government-guaranteed securities using securitization (or other private means). The complexity of student-loan-backed securities relative to Treasury securities makes them harder to value, and the costs that investors must incur to obtain information and expertise about them reduces their liquidity. Because the underlying student loans are guaranteed by the government, costs incurred to understand the securities and evaluate counterparty and other risks have little apparent value to society. Furthermore, the variation in funding costs that exists among FFEL lenders suggests that some lenders in the program are considerably less efficient than others and that, hence, their higher funding costs have no offsetting benefit to taxpayers.

To the extent that FFEL lenders pay more to fund their borrowing than can be attributed to a transfer of risk from taxpayers to the private sector, the FFEL program has a true cost disadvantage because of counterparty risk, liquidity risk, and securitization inefficiencies not present in the direct loan program. Lenders can profitably remain in the FFEL program only to the extent that special allowance payments compensate them for those additional costs.

Budgetary Costs of the Student Loan Programs

CBO and the Office of Management and Budget calculate the budgetary costs of federal student loan programs on an accrual basis according to guidelines specified in the Federal Credit Reform Act of 1990 (FCRA). Under that law, the cost—known as a credit subsidy—of new federal loans and loan guarantees is recorded in the budget in the year the loans are disbursed. The credit subsidy is calculated as the net present value (as of the year of disbursement) of the government's expected cash flows over the lifetime of a loan or guarantee, using interest rates on Treasury securities of comparable maturity to discount the estimated cash flows. Those subsidy estimates do not include the government's expenses for operating the programs (including the costs of originating, servicing, and collecting on loans); such administrative expenses are shown elsewhere in the federal budget on a cash basis.

By that FCRA accounting, the guaranteed loan program has consistently appeared to be more costly per dollar of lending than the direct loan program. Indeed, FCRA subsidy rates—the subsidy cost per dollar of loan amount—have frequently been negative for the direct loan program, meaning that the loans were credited in the budget with creating savings for the government.

FCRA subsidy rates for loans originated in the direct and guaranteed loan programs—and the difference between the two programs' subsidy rates—vary over time with changing market conditions and program rules. Some of the variation occurs because the terms on loans offered to students and the government's payments to lenders are fixed by statute, whereas the Treasury interest rates used to discount cash flows vary widely as market conditions change. In 2009, FCRA subsidy rates were negative for both programs because the fixed interest rate on new loans was much higher than rates on Treasury securities of similar maturity, which were at historically low levels.

Fair-Value Costs of the Student Loan Programs

Although they are used for federal budgeting, FCRA subsidy estimates are not comprehensive measures of the costs of the federal student loan programs, for two main reasons: They do not take into account the cost of some of the risks that student loans impose on taxpayers, and they omit most administrative costs (which are recorded elsewhere in the budget).[22] Because of the different structures of the direct and guaranteed loan programs, those

22. The same limitations apply to subsidy estimates for other federal credit programs that are accounted for under FCRA.

omitted costs are greater, on balance, in the direct program, which leads to an overstatement of cost differences between the two programs. For those reasons, some analysts have asserted that the reported difference between the subsidy rates of the direct and guaranteed loan programs is not meaningful.[23]

Fair-value subsidy estimates, which include the cost of risk and administrative costs, provide a more comprehensive measure that allows the costs of the two programs to be compared on a level playing field.[24] The fair value of an asset is the price that the asset would bring if it was sold in an orderly transaction between willing market participants on a specified measurement date.[25] In general, the government furnishes a subsidy—on a fair-value basis—whenever it accepts terms on the financing it provides that are more favorable than the terms that participants in private markets would demand to take on comparable obligations and risks.[26] The cost of credit subsidies is ultimately borne by taxpayers, because gains and losses on federal loans or loan guarantees ultimately must be covered through the tax system.

Measured on a fair-value basis, the government's costs of making a loan in both the direct and guaranteed loan programs are higher than those costs as measured under FCRA, and subsidy rates are uniformly positive, meaning that each new dollar of lending under the programs costs the government money. In addition, the adjustments for risk and administrative costs lessen the difference between the two programs relative to FCRA estimates. Even with those adjustments, however, the average subsidy rate on a representative guaranteed loan remains higher than if the same loan was originated in the direct program.[27] The main reason for the higher subsidy rate on guaranteed loans (both on a fair-value basis and under FCRA) is that the costs of administering the FFEL program, including payments to lenders and guaranty agencies, exceed the administrative costs associated with lending through the direct loan program.

Accounting for Costs Omitted from FCRA Subsidies

CBO's fair-value subsidy estimates employ many of the same assumptions and methods that are normally used to estimate costs under FCRA. The two main differences are that discount rates include a risk premium (the additional return that private investors would require to bear the risks of student loans), and federal administrative costs are fully allocated between the two programs.

Using Treasury interest rates to discount expected cash flows on risky loans generally produces higher estimated values for the loans than what private investors would willingly pay for them. Consequently, when the government offers loans to risky borrowers on fair-value terms, those loans appear to make money for the government (that is, they have negative subsidy rates as calculated under FCRA). Moreover, the greater the riskiness of those loans, the higher are the expected gains to the government under FCRA accounting. Similarly, FCRA accounting understates the fair-value cost to the government of federal loan guarantees, and that understatement is higher the greater the risk that is involved. To infer the effects of risk on the fair value of federal obligations for student loans, CBO relied mainly on data about the interest rates charged to borrowers in the private student loan market. CBO also considered patterns in the rates charged for other types of consumer credit.

Excluding administrative costs from FCRA subsidies understates the cost of both programs, but particularly of the direct program, in which all administrative functions are handled and paid for directly by the Department of Education. In the guaranteed loan program, by contrast,

23. See, for example, Dennis Zimmerman and Barbara Miles, "Substituting Direct Government Lending for Guaranteed Student Loans: How Budget Rules Distorted Economic Decision Making," *National Tax Journal*, vol. 47, no. 3 (December 1994), pp. 773–787; and Kevin Bruns, "The Hidden Costs of Direct Loans," *Chronicle of Higher Education*, vol. 53, no. 42 (June 22, 2007).

24. Although fair-value estimates are not used in budgeting for federal credit obligations, CBO values the government's asset purchases under the Troubled Asset Relief Program on what is effectively a fair-value basis, using procedures similar to those specified in FCRA but adjusting for market risk as directed by the Emergency Economic Stabilization Act of 2008.

25. See Financial Accounting Standards Board, *Statement of Financial Accounting Standards No. 157: Fair Value Measurement* (September 2006), p. 2.

26. In general, an economic subsidy can exist even though a program has positive net income if the costs that are used to determine net income are not comprehensive. The conceptual issues surrounding estimates of economic subsidies for credit programs are described in Congressional Budget Office, *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees* (August 2004).

27. Unless otherwise noted, average subsidy rates are based on averages across all types of loans projected to be originated from 2010 to 2020.

Table 3.

Projected Fair-Value and FCRA Subsidy Rates for Representative Loans and Borrowers, by Fiscal Year

(Percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average, 2010–2020
Fair-Value Estimates (Using risk-adjusted discount rates and including administrative costs)												
Direct Loan Program	13	13	11	7	9	11	12	13	13	13	13	12
Guaranteed Loan Program	16	21	20	18	19	20	20	20	20	20	20	20
FCRA Estimates[a] (Using Treasury discount rates and excluding administrative costs)												
Direct Loan Program	-18	-14	-13	-12	-10	-7	-6	-4	-4	-4	-4	-9
Guaranteed Loan Program	-11	1	4	4	6	7	8	8	8	8	8	5

Source: Congressional Budget Office.

Notes: Subsidy rates show the impact on the federal deficit of a dollar's worth of lending under a given program. For example, a subsidy rate of 13 percent means that each dollar of lending increases the deficit by 13 cents.

The subsidy rates in this table are based on the mix of loan types and borrower characteristics projected for the Federal Family Education Loan (FFEL) program in each time period. Thus, the rates reported for the direct loan program represent the cost of making a typical FFEL loan in the direct loan program instead of in the FFEL program. The rates shown here for the direct loan program using the FCRA methodology do not correspond to CBO's published estimates for the direct loan program.

a. Subsidy rates calculated according to the procedures specified in the Federal Credit Reform Act of 1990 (FCRA) are used for federal budget estimates. Those subsidy rates exclude administrative costs (including payments to Department of Education contractors, certain statutory payments for collection costs, and statutory payments to guaranty agencies).

the government payments that compensate FFEL lenders for administrative functions are included in FCRA subsidy rates (categorized as interest). To account fully and symmetrically for federal administrative costs in its fair-value subsidy estimates, CBO allocated the various federal administrative costs between the two programs and between newly originated and outstanding loans on the basis of information from the Department of Education and private lenders. For each program, CBO discounted the lifetime administrative costs for each cohort of borrowers to the disbursement date and included the total in its estimates of fair-value subsidy costs.[28] (For additional information about the discount rates and adjustment for administrative costs, see the appendix.)

Fair-Value Subsidy Estimates

CBO's estimates of subsidy rates for new federal student loans over the next decade are considerably higher on a fair-value basis than under FCRA accounting (see Table 3).[29] Those subsidy rates are based on the characteristics of a representative FFEL loan—one that reflects average default and prepayment behavior by borrowers and the average mix of loan types under current law. The subsidy rates are also based on projections of interest rates and other market conditions from the economic outlook that underlies CBO's March 2010 baseline budget projections. A number of factors account for the year-to-year

28. One reason for excluding administrative costs from subsidy estimates is the difficulty of dividing total costs among individual loan cohorts. However, certain costs, such as for servicing and collection, are relatively easy to estimate, and there are standard approaches for allocating fixed costs among programs.

29. The results presented in this section differ from those in the *Budget of the United States Government: Federal Credit Supplement*, which is prepared by the Office of Management and Budget. That agency reports the costs of consolidation loans separately from the costs of the Stafford or PLUS loans being consolidated. CBO, by contrast, treats consolidation loans as extensions of the original loans, consistent with the principle of recognizing the value of a contractual right (in this case, the right to consolidate) at the time it is granted.

variation in subsidy rates, including rising interest rates and declining risk premiums. The upward trend in market interest rates accounts for the general pattern of higher subsidy rates over time. A slightly offsetting effect for the fair-value estimates is that the risk premium is projected to gradually fall to normal levels as conditions in financial markets improve, which decreases the relative cost of fair-value subsidies in later years.

Adjusting for risk and administrative costs narrows the gap in average subsidy rates on a representative loan between the two programs relative to FCRA estimates but does not eliminate it. On a fair-value basis, the average subsidy rate over the 2010–2020 period is 8 percentage points (20 minus 12) higher for a loan originated in the guaranteed loan program; under FCRA, it is about 13 percentage points (5 minus -9, with rounding) higher. The gap is narrower on a fair-value basis because payments to FFEL lenders are less costly to the government when the risk of those payments is taken into account.

Components of the subsidy rates can be illustrated using estimates for 2020 on a fair-value basis and on an alternative basis in which all cash flows are discounted using Treasury rates—similarly to FCRA estimates, but with the inclusion of administrative costs. The divergence in average subsidy rates is driven largely by the difference between the government's payments to lenders in the guaranteed loan program and federal administrative costs in the direct loan program (see Table 4). The higher cost of payments to lenders in the FFEL program is only partly offset by the share of default losses retained by those lenders. The subsidy rates for the portion of cash flows associated with borrowers' repayments are almost identical in the two programs, regardless of the discount rate used to value them.[30] Payments to guaranty agencies that exceed the amount necessary to cover their costs of collecting on defaulted loans add to the cost of the FFEL program, but by an insignificant amount.

The student loan programs affect not only federal spending but also revenues from corporate income taxes. The different degrees of public and private involvement in the direct and guaranteed loan programs mean that more corporate tax revenues are generated under the guaranteed loan program. Those revenue effects are not included in CBO's subsidy estimates (although they are accounted for elsewhere in the budget). A 2005 study by PricewaterhouseCoopers estimated that the corporate tax receipts produced by the FFEL program had a present value of 1.5 cents per dollar of loans originated.[31] That figure is probably smaller today because of recent reductions to lenders' special allowance payments. Furthermore, the PricewaterhouseCoopers study did not include tax receipts from private-sector contractors for the direct loan program, which would further diminish the difference. Hence, incorporating the effect of taxes would offset only a small portion of the estimated cost difference between the two programs.

Sensitivity Analysis

CBO's fair-value subsidy estimates are highly sensitive to assumptions about a variety of uncertain factors, such as the effect of risk on discount rates and the allocation of federal administrative costs between programs. Nevertheless, under a wide range of assumptions, the guaranteed loan program is consistently more expensive than the direct program, and both programs' subsidy rates are significantly positive on a fair-value basis.

Sensitivity to Risk Adjustment of Discount Rates. The rates used to discount cash flows on federal student loans, which CBO inferred primarily from interest rates charged on private student loans, involve considerable uncertainty, for several reasons. First, rates from a private market may not accurately represent the risk of federal loans (for instance, loan terms and characteristics of borrowers differ). Second, those rates can fluctuate considerably over time with market conditions. If the risk premium for student loan cash flows was 1 percentage point higher than that assumed in CBO's base case, subsidy rates would increase by 6 percentage points for a typical loan made in the FFEL program, and by 8 points if the same loan was made in the direct program. (A reduction of 1 percentage point in the risk premium would decrease subsidy rates by the same amounts.) In the case of direct loans, that effect is most easily understood as the higher discount rate reducing the value of future repayments. For guaranteed loans, greater market risk has the effect of

30. A small difference arises because in the direct loan program the government pays for certain benefits to borrowers.

31. PricewaterhouseCoopers, National Economic Consulting Group, *The Limitations of Budget Score-keeping in Comparing the Federal Student Loan Programs* (Washington, D.C.: PricewaterhouseCoopers, March 3, 2005), available at www.studentloanfacts.org/resources/.

Table 4.

Components of Estimated Subsidy Rates for Loans Made in Fiscal Year 2020

(Percent)

	Fair-Value Subsidy		Subsidy Computed with Treasury Discount Rates[a]	
	Guaranteed Loan Program	Direct Loan Program	Guaranteed Loan Program	Direct Loan Program
Loan Disbursement	100.0	100.0	100.0	100.0
Present Value of Loan Payments[b]	-89.5	-88.8	-103.5	-102.7
Loan Subsidy	10.5	11.2	-3.5	-2.7
Federal Administrative Costs[c]	0.7	2.2	0.8	2.5
Lenders' Share of Default Losses	-1.3	n.a.	-0.3	n.a.
Payments to Lenders[d]	9.4	n.a.	13.0	n.a.
Payments to Guaranty Agencies[e]	0.9	n.a.	1.0	n.a.
Total Subsidy	**20.2**	**13.4**	**11.0**	**-0.2**

Source: Congressional Budget Office.

Notes: All components of the subsidy are based on the mix of loan types projected for the Federal Family Education Loan (FFEL) program in 2020. Thus, the subsidy rate reported for the direct loan program represents the cost of making a typical FFEL loan in the direct loan program instead of in the FFEL program.

n.a. = not applicable.

a. The subsidy rates shown in these columns do not follow the methodology specified in the Federal Credit Reform Act. Although cash flows are discounted at Treasury rates, as required under FCRA, they include various administrative costs and other payments that CBO would normally exclude to comply with FCRA requirements.

b. Includes collection costs and origination fees. The present value of loan payments for the direct loan program is different than for the guaranteed loan program because borrowers in the direct program pay lower interest rates on PLUS loans and may receive other discounts.

c. Excludes collection costs, which are included with loan payments.

d. Includes special allowance payments to lenders minus various statutory fees that lenders pay (and excluding lenders' share of default losses, which is shown separately). Lenders may use those payments to offer benefits to borrowers and services to schools as well as to defray various costs of financing and administering loans.

e. Includes fees for loan processing and account maintenance. (Payments received for loan collection are included with loan payments.)

increasing the present value of payments made on guarantee claims for defaulted loans.

Incorporating a risk premium into estimates also lowers the present value of some federal payments to lenders, which narrows the cost difference between the two programs. The rates that CBO used to discount those projected payments differ from the rates it used to discount loan cash flows, because the two streams of cash flows involve different amounts of risk and differ in the extent to which they depend on fixed versus variable interest rates. CBO's imputation of the discount rate for payments to FFEL lenders depends in part on the interest rate spread over Treasury rates that those lenders pay to finance their guaranteed student loans. That spread has varied over time and among lenders, ranging from as little as 0.3 percentage points above the yield on Treasury securities for the most efficient lenders to more than 2 percentage points during the financial crisis.

The appropriate discount rate for federal payments to FFEL lenders depends on how much of the spread over Treasury rates that lenders pay to fund their borrowing can be attributed to an offsetting savings to taxpayers from a transfer of risk to the private sector. The greater the transfer of risk, the higher the appropriate discount rate, but the amount of that risk transfer is highly uncertain. CBO discounted the variable-rate payments at a rate that was 0.3 percentage points higher than the comparable Treasury rate. Increasing that spread above the

Treasury rate to 0.6 percentage points decreases the subsidy rate on FFEL loans by about 2 percentage points.

Sensitivity to Administrative Costs. For its fair-value calculations, CBO divided unallocated cash administrative costs between the two programs according to their relative dollar amounts of loans outstanding. That approach may overstate the administrative costs of the guaranteed loan program if most administrative functions are performed by FFEL lenders. An alternative approach, which provides the most favorable case with regard to the cost of the guaranteed loan program, is to assume that all of the unallocated administrative costs reported by the Department of Education are used for expenses of the direct loan program. With that change in assumptions, the difference between the average cost of the two programs falls from about 8 percentage points to 5.5 percentage points.

Policy Options

Policymakers have considered a variety of modifications to the federal student loan programs—some aimed at reducing the costs of the programs to the government and others intended to change the loan terms available to borrowers. In evaluating options to modify those programs, it is useful to consider the various ways in which federally backed credit for education can improve social welfare, as well as the potential drawbacks of such credit.

The benefits to students from federal loans may exceed the fair-value cost to the government of providing them if the private market for student loans operates imperfectly. For example, private lenders cannot profitably lend to all borrowers if they cannot effectively evaluate differences in the risk of default. Because their ability to evaluate that risk is limited, in a purely private market some borrowers would wind up being denied credit.[32] However, some evidence suggests that federal policy has been effective at easing such constraints for most students.[33] Thus, when considering new policies to relieve financial constraints, it may be most cost-effective to focus on constraints faced by subsets of the population that still have limited access to what they perceive as affordable credit (or other means of financing an education). It may also be cost-effective to examine policies in which the government adjusts repayment terms to accommodate borrowers' risky or low-paying career choices or to help borrowers during periods of financial distress. Such policies can provide valuable insurance that would not be feasible for borrowers to obtain privately because of the losses it would entail for private lenders.

The benefits of subsidizing education may also outweigh the costs when education produces benefits for society in addition to the private benefits enjoyed by the student. Students may fail to take those social benefits into account when making choices about their education, which provides a case for government subsidization. A number of studies offer evidence of such social benefits.[34] Others, however, suggest that social benefits have proved difficult to identify and quantify and that the case for further subsidizing higher education may be weaker than the case for the current level of subsidies.[35]

An unintended consequence of making subsidized credit available is that it may cause some people to overinvest in higher education. Such overinvestment could take the form of students' choosing formal higher education in place of cheaper on-the-job training or instead of entering the labor force sooner. Students may also be harmed by easy access to credit if they underestimate the burden of paying off their loans later on. In addition, there are

32. Although the government is unlikely to have an advantage over the private sector in evaluating risk, it can alleviate borrowing constraints by lending to people who would be denied credit by private lenders (thereby providing a subsidy to those borrowers).

33. For example, one study concludes that fewer than 8 percent of student loan borrowers are constrained; see Pedro Carneiro and James J. Heckman, "The Evidence on Credit Constraints in Postsecondary Schooling," *Economic Journal,* Royal Economic Society, vol. 112, no. 482 (October 2002), pp. 705–734.

34. See Enrico Moretti, "Estimating the Social Return to Higher Education: Evidence from Longitudinal and Repeated Cross-Sectional Data," *Journal of Econometrics,* vol. 121, no. 1–2 (July–August 2004), pp. 175–212. In that analysis, Moretti concluded that college education creates positive spillovers in productivity and wages. See also Eric Hanushek and Ludger Woessmann, *Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation,* Working Paper No. 14633 (Cambridge, Mass.: National Bureau of Economic Research, January 2009). In that analysis, the authors found empirical evidence of a causal relationship between educational attainment and growth rates among countries. For a discussion of the relationship between postsecondary education and social mobility, see Robert Haveman and Timothy Smeeding, "The Role of Higher Education in Social Mobility," *Future of Children: Opportunity in America,* vol. 16, no. 2 (Fall 2006), pp. 125–150.

35. See James J. Heckman and Peter J. Klenow, "Human Capital Policy," in Michael Boskin, ed., *Policies to Promote Capital Formation* (Stanford, Calif.: Hoover Institution, 1998).

probably some borrowers for whom the availability of federal student loans does not alter their educational attainment. In the case of those borrowers, a federal credit subsidy is simply a transfer payment to them from taxpayers as a group.[36]

Reducing the Federal Cost of the Guaranteed Loan Program

Policy options that have been discussed for lowering the federal cost of the FFEL program include replacing it entirely with direct lending, funding all federal student loans through the Treasury but continuing to have private lenders perform administrative functions, cutting government payments to lenders, reducing the guarantee percentage on loans, and auctioning off the right to lend under the program.

Replace Guaranteed Lending with Direct Lending. The President's 2011 budget proposed eliminating the FFEL program after July 1, 2010, and replacing it with an expansion of the direct loan program.[37] CBO recently estimated that under FCRA accounting, that proposal would reduce mandatory spending by a total of $68 billion over the 11 years from 2010 through 2020.[38] At the same time, however, discretionary spending for administrative costs in the direct loan program would increase, so the net budgetary savings over the 2010–2020 period would amount to about $62 billion. The savings on a fair-value basis (taking into account the cost of market risk and the present value of future administrative costs) were estimated at about $40 billion for that period. The cost reduction results primarily from eliminating federal payments to FFEL lenders that exceed the administrative costs associated with loans in the direct program. The savings are smaller on a fair-value basis because that measure, which takes into account the risk associated with those payments, assigns them a lower cost to the government and thus finds a smaller benefit from eliminating them.

Finance Guaranteed Loans Through the Treasury. An option that would avoid the higher funding costs of the FFEL program and prevent disruptions in the supply of credit would be to fund all federal student loans through the Treasury. Under that approach, the Treasury would buy the loans made by FFEL lenders, but the infrastructure of the FFEL program would be retained for other administrative functions. At the same time, payments from the government to lenders could be reduced by the amount of the savings from lower funding costs. To realize similar savings from that change as from eliminating new guaranteed lending entirely, however, compensation for administrative services under the FFEL program, including services performed by guaranty agencies, would have to be set on a competitive basis rather than by statute, as in current law.

Switching to financing all federal student loans through the Treasury would increase the amount of federal debt outstanding, but that increase would be offset by a decrease in federally guaranteed private debt. Because federal obligations would essentially be unchanged, and because federal debt would increase by only a small percentage, CBO expects that the effect on the government's borrowing costs would be negligible. However, the increase in the size of the federal debt would affect its relation to the statutory debt ceiling.

Reduce Payments to Lenders or the Percentage of the Federal Guarantee. CBO's analysis suggests that a major reason for the higher cost of the FFEL program is the fact that, under normal conditions in financial markets, statutory compensation to lenders exceeds estimated administrative costs in the direct loan program.[39] Lowering lenders' spread over the interest rate on three-month commercial paper by, for instance, 0.4 percentage points from current levels would reduce the fair-value subsidy rate on guaranteed loans by 3 percentage points.

Another way to reduce the cost of the FFEL program would be to lower the guarantee percentage. Currently, the government guarantees 97 percent of a loan's outstanding principal and interest for most lenders; that figure is scheduled to fall to 95 percent in 2013. Lowering the guarantee to 90 percent would reduce the fair-value

36. Because transfer payments must be paid for with taxes that distort people's incentives to work and invest, such subsidies have social costs as well.

37. The House of Representatives recently passed legislation (H.R. 4872, the Health Care and Education Affordability Reconciliation Act of 2010) that would implement that proposal, and the Senate is considering the legislation.

38. Congressional Budget Office, letter to the Honorable Judd Gregg about the budgetary impact of the President's proposal to alter federal student loan programs (March 15, 2010).

39. The abnormally high funding costs for FFEL lenders in the current market environment have absorbed those excess payments, but CBO expects that making guaranteed loans will again become profitable for lenders as market conditions improve.

subsidy rate on guaranteed loans by 2 percentage points. Cutting the guarantee percentage could have the effect of narrowing the set of potential investors willing to buy student loans—because riskier loans require more expertise to evaluate—thereby increasing the funding costs of FFEL lenders and the compensation necessary to induce them to participate in the program.

Reducing special allowance payments or the guarantee percentage could have other consequences as well. Such cuts might leave some lenders with too little cash coming in to recover their funding and administrative costs, even under normal market conditions. Some lenders would probably leave the program and be replaced by lower-cost lenders or by the direct loan program. Lenders would also be likely to reduce the benefits and services they offer to borrowers. Moreover, FFEL lenders might find it unprofitable to serve borrowers or schools whose loans have higher risks and are more costly to finance and administer, which could force those schools into the direct loan program. Cutting payments to or protections for lenders would also increase the probability that emergency interventions would be needed in the event of future market disruptions. Those effects are hard to quantify—because of the difficulty in assessing costs across the diverse range of schools, borrowers, and lenders in the guaranteed loan program—and CBO did not attempt to do so.

Add Competitive Auctions. Auctioning off the rights to originate or hold guaranteed student loans has been proposed as a market-based alternative to cutting lenders' payments or the guarantee percentage. In a well-designed auction, the winning bids would reflect the cost of funding and administering loans for the most efficient lenders, eliminating the excess profits that arise when compensation is fixed in legislation.[40] To explore this possibility, the College Cost Reduction and Access Act of 2007 mandated a pilot auction program for PLUS loans. But the initial attempt to implement it failed to attract any bidders, and the program was postponed for two years.

Several factors may limit the ability of auctions (or any similar mechanism) to substantially reduce the difference in subsidy rates between the two loan programs. Historically, private lenders have offered better service at greater cost than the direct program does. Lenders may bid less aggressively if they expect that they will need to maintain higher service levels to attract borrowers—particularly if winning an auction does not guarantee exclusive access to a pool of borrowers. Similarly, lenders' administrative costs include marketing expenses, which winning bidders will continue to incur if the auction does not guarantee them a certain volume of lending, and which they will therefore factor into their bids. Furthermore, to the extent that FFEL lenders have higher financing costs, the bid price will continue to incorporate those higher costs. Collusive bidding is also a concern, especially in an industry dominated by a few large participants.

Restructuring Loans

The Congress has periodically changed the interest rates and other terms on federal student loans to meet goals such as increasing the affordability and availability of credit for students or preventing defaults. The structure of student loans also affects the level and volatility of federal program costs (as measured on both a fair-value and a FCRA basis).

Interest Rates. Policy options for modifying the interest rates charged to borrowers include raising or lowering the current fixed rates; indexing those fixed rates to a market interest rate; or changing from fixed rates to variable rates, with an upper limit, or cap, on the variable rates. In the past, the direct and guaranteed loan programs have switched several times between charging a fixed interest rate set in statute and charging a variable rate (tied to a market index) with a cap. Since July 2006, loans made under either program have carried fixed interest rates.

Since 1998, borrowers have been able to consolidate their Stafford and PLUS loans into a single loan with a fixed interest rate equal to a weighted average of the interest rates on the underlying loans. For borrowers with variable-rate loans, the right to consolidate is a valuable option—in many cases it allows borrowers to lock in fixed interest rates that are well below the alternatives available in private markets. Taking into account historical variation in interest rates (and using discount rates adjusted for risk), CBO concluded that the right to consolidate variable-rate loans added approximately 2 percentage points to the subsidy rates for direct and guaranteed student loans.[41]

40. For an assessment of the options and issues involved in designing an auction program, see Department of Education and General Accounting Office, *Alternative Market Mechanisms for the Student Loan Program,* GAO-02-84SP (December 18, 2001).

41. Congressional Budget Office, *The Cost of the Consolidation Option for Student Loans*.

The federal costs of the student loan programs are very sensitive to the interest rates on the loans. For instance, each decrease of 1 percentage point in the interest rate charged to borrowers increases the fair-value subsidy rate by approximately 7 percentage points. The increase is slightly higher for FCRA subsidy rates (because discounting at a lower rate makes reductions in interest payments that occur in the future more costly to the government in present-value terms).

Fixing by statute the rate charged to borrowers has the effect of adding considerable volatility to the cost of the federal student loan programs over time, whether measured under FCRA accounting rules or on a fair-value basis. Under the assumptions of a fixed 6.8 percent rate on Stafford loans and future interest rate levels and volatility consistent with experience, the fair-value subsidy rate on a loan issued in 2014 would have a 10 percent probability of being at least 6 percentage points more than currently projected purely because of variation in future interest rates. Setting interest rates by statute also causes the subsidies that different cohorts of borrowers receive to differ considerably; the greatest benefits go to students who happen to attend college when market interest rates are well above the statutory rate on student loans.[42] Conversely, when market interest rates are low, students receive relatively little federal subsidy.

One way to avoid large fluctuations in the subsidy cost of federal student loans over time would be to index interest rates to a market rate. In the case of fixed-rate loans, the yield on long-term Treasury securities could provide an appropriate index; for variable-rate loans, the yield on short-term Treasury bills could provide such a base.[43] A concern about indexing is that it exposes students to the possibility of being charged high interest rates. However, high interest rates tend to occur during periods of high expected inflation, when future income is also likely (though not certain) to grow at a faster-than-average rate. An alternative approach that would make subsidies less volatile than under current law, but that would protect students from unusually high interest rates, would be to index interest rates and also put a cap on them. Such a cap exists now for variable-rate student loans that were made before the switch to fixed rates in July 2006.

Repayment Terms. The repayment terms offered to borrowers affect the costs of the student loan programs because they can influence the probability and severity of defaults as well as the length of time that subsidized loans remain outstanding. Repayment terms also have a significant impact on the welfare of borrowers—for instance, by affecting how much flexibility they have in their future career choices. Options for modifying those terms include changing the current forbearance and deferment policies and introducing additional loan-forgiveness policies that would be contingent on a borrower's income or career.

In the past, student loans had the highest rates of default of any federal credit program. High default rates are not surprising given that most student borrowers have few assets after graduating and student loans are unsecured. Default rates and losses from defaults have fallen dramatically over time, however, because of various factors specific to the loan programs as well as other legal and economic developments. Changes to the bankruptcy code generally prevented federal student loans from being discharged, or erased, during bankruptcy proceedings (with some exceptions). In addition, use by FFEL lenders of the default-averting provisions of federal student loans—such as forbearance and deferment, which allow borrowers to temporarily stop making payments—has become more common.[44] And individual schools and lenders have increased their oversight of loan performance. In particular, the Department of Education excludes schools and lenders from participating in the student loan programs if they exceed specified thresholds for two-year default rates on individual cohorts of loans.

42. Offering similar subsidy rates to all cohorts may be perceived as fair. However, policymakers might want to offer different subsidies to different cohorts for various reasons. For instance, cohorts that graduate when the labor market is weak tend to experience persistently poorer employment prospects, which may justify a higher subsidy for those groups. There is considerable variation in the amount of time between when a borrower takes out a loan and when repayment begins, and market conditions may change in the interim. Thus, the variation in subsidy rates over time caused by fixing interest rates by statute is unlikely to efficiently help borrowers who graduate during recessions.

43. A return to variable-rate lending would transfer to students the interest rate risk that is now borne by the government.

44. Private lenders also offer forbearance on nonguaranteed student loans because doing so for a borrower who faces a short-term liquidity problem can be less costly to a lender than trying to collect on the same loan in default. Nevertheless, the use of forbearance on student loans is less pervasive in the private market than in the federal programs.

Some of the decline in default rates may also have resulted from the strong performance of the overall economy and the growth in demand for college graduates over the past several decades. However, in the aftermath of the recent deep recession, with the unemployment rate remaining high, default rates may be above their recent levels for at least the next few years.

Although forbearance and deferment policies avoid some defaults, they also entail significant costs for the government because they lengthen the average repayment period of a loan at below-market interest rates. Under current law, forbearance for as long as three years is available to borrowers who can show evidence of financial hardship.[45] In addition, borrowers in both programs can defer repaying existing loans by starting a new course of study. And students have a six-month grace period after they leave school before they must begin repayment. Data suggest that a typical borrower spends about three years in grace and deferment.

The recovery rate on defaulted loans—the present value of the cash flows recovered for each dollar of loans in default (net of the costs of collection)—also affects the cost to the government from borrowers' defaults. The Department of Education has strong collection mechanisms available that bolster its recoveries. The inability of borrowers to have their student loans discharged in bankruptcy proceedings extends the period over which delinquent loans can be collected to the entire lifetime of the borrower.[46] Besides using private loan-collection agencies, the department can garnish the wages of delinquent borrowers and use the Treasury Offset Program to collect a portion of federal transfer payments (such as tax refunds or Social Security benefits) that they receive.

The department can charge the full cost of collecting on a defaulted loan to the borrower, which theoretically means that 100 percent of the outstanding principal and interest on the loan is collectible. In practice, however, recovery rates are lower than that because some borrowers never repay in full (such as those who evade collection, remain in a perpetual state of poverty, become disabled, or die) and because the department has discretion to negotiate settlement terms and waive collection costs. From a fair-value perspective, even if 100 percent of the outstanding principal and interest, plus collection costs, were recovered by rehabilitating or consolidating a loan, the private sector would value that recovery at less than 100 percent. The reason is that the collection process extends the time that the loan is outstanding and earning an interest rate less than market rates.

Strong collection mechanisms reduce the costs of default to the federal government, but they may harm the very populations that student loans are intended to help. Delinquencies on student loans are reported to the national credit bureaus, which reduces those borrowers' ability to obtain further credit, jobs, and housing, especially if they fail to complete their course of study. That situation has led some policymakers and analysts to advocate broadening the existing provisions for loan forgiveness and income-contingent repayment, which currently play only a minor role in the student loan programs.

Greater loan forgiveness and more reliance on income-contingent repayment have also been proposed as options to reduce the debt burden on certain groups of students. The idea is that borrowers who have less ability to pay because of a personal misfortune or choice of career (such as the military, public service, or teaching) should be allowed to pay less for their education than borrowers with greater resources. In a carefully designed program, some of the costs of subsidizing borrowers who ultimately are less able to repay their loans may be covered by charging higher fees or interest rates to borrowers who can repay—much as insurance programs do. Such insurance provisions would be unique to federally provided credit because the ability to cross-subsidize borrowers depends on having market power: In a competitive private market, if a single small lender tried to charge a high-income borrower an above-market rate, the borrower would repay the loan with money borrowed at a lower rate from another lender. The federal government can avoid that problem by setting rates that are lower than market rates, including for high-income borrowers.

45. Some deferments also are available on a hardship basis.

46. For other types of unsecured loans, state-level statutes of limitations typically prevent loans from being collected beyond a certain window of time (generally 3 to 10 years).

Appendix: Assumptions and Analysis Underlying CBO's Fair-Value Subsidy Estimates

The Congressional Budget Office's (CBO's) fair-value estimates of the cost of student loan programs depend on the same cash flows assumed for the estimates that follow the accounting procedures specified in the Federal Credit Reform Act of 1990 (FCRA). However, to calculate the fair-value estimates, CBO used additional information and assumptions in order to allocate federal administrative costs between the direct and guaranteed loan programs and among different loan cohorts as well as to derive discount rates adjusted for risk. This appendix describes the information and assumptions that CBO used.

Administrative Costs

The federal costs that CBO classifies as administrative are recorded in the budget on a cash basis, as required by FCRA, for both student loan programs.[1] In the Federal Family Education Loan (FFEL) program, the Department of Education directly bears some of the administrative costs of guaranteed loans (such as the costs of collecting on loans that have been in default for more than three years and of supporting schools' financial aid offices); those costs are recorded together with the total administrative costs for the direct loan program. At the same time, some of the department's payments to FFEL lenders (which cover administrative costs such as loan servicing) are classified in the budget as part of mandatory interest payments, and the present value of those costs for each loan cohort is included in FCRA subsidy estimates.[2]

As a result of that accounting, the administrative costs that appear in the budget on a cash basis are a mixture of costs from old and new student loans and from the FFEL and direct loan programs. To estimate the lifetime federal administrative costs attributable to newly originated loans in each program for its fair-value estimates, CBO relied primarily on data from the Department of Education. Detailed information on administrative costs was limited; CBO used data from the 2006 program year to impute the normal allocation of federal administrative costs, by activity, between the two programs. Because the factors that determine administrative costs and the proportion coming from each program are likely to be similar from year to year (under normal market conditions), that approach is unlikely to create a bias in estimates for future years, in CBO's judgment. The sensitivity analysis discussed earlier in this study also shows that the resulting estimates are not very sensitive to assumptions about the allocation of federal administrative costs.

In 2006, the annual appropriation to the Department of Education for the direct and guaranteed loan programs totaled approximately $800 million. In information given to CBO at that time, the department reported allocating about $200 million of the appropriation to servicing contracts in the direct loan program, $30 million to origination contracts in the direct loan program, and $200 million to recovery contracts in both programs. In its base-case analysis, CBO assumed that approximately

1. Some of the programs' administrative costs are mandatory, and others are discretionary. The mandatory portion involves items in the guaranteed loan program, such as fees to guaranty agencies, that are required by law to be paid.

2. Those payments also cover benefits to schools and borrowers that might not be considered basic administrative costs. In addition, the Office of Management and Budget's FCRA subsidy estimates include federal payments to guaranty agencies for collection costs and fees, but CBO's FCRA subsidy estimates do not.

half of the unallocated $370 million was attributable to administration in the guaranteed loan program, one-quarter to administration in the direct loan program, and the remaining one-quarter to administration in the Pell grant program. Those amounts yield an estimate that the government's annualized origination and servicing costs equal about 0.3 percent of outstanding loan balances in the direct loan program and 0.1 percent in the guaranteed loan program. To produce fair-value subsidy rates, those estimates of administrative costs were applied to projected loan balances and discounted to the present.

The costs incurred by FFEL lenders and guaranty agencies do not directly affect government spending because federal payments to lenders do not depend directly on lenders' actual expenses. However, an estimate of those expenses is necessary to calculate the cost of capital for student loans and to identify the causes of the higher costs in the FFEL program.[3] Using an analysis of the reported administrative costs of a large FFEL lender in 2006, CBO estimated that origination and servicing costs totaled 0.67 percent of outstanding balances for guaranteed loans, slightly more than twice the costs in the direct loan program. The greater costs for FFEL lenders can be attributed at least in part to higher service levels to students and schools, as well as to higher marketing costs arising from the need to compete with other lenders. CBO's estimates of administrative costs for FFEL lenders involve considerable uncertainty, both because data are limited and because administrative costs are likely to vary greatly among lenders according to their size and efficiency.

Fair-Value Cost of Capital

The cost of capital refers to the expected return that private investors require on a risky security to be willing to buy it. CBO used the interest rates charged to borrowers on private student loans, adjusted for administrative costs, as the starting point for inferring the fair-value cost of capital for federal student loans. That cost of capital in turn was used to derive risk-adjusted discount rates.

The main lenders in the private loan market are also the largest FFEL lenders: Sallie Mae, major national and regional commercial banks, and nonprofit entities. FFEL lenders have a competitive advantage over other potential entrants in the private student loan market because of economies of scale in marketing, systems administration, and funding as well as the experience gained from guaranteed lending. Borrowers turn to private lenders—whose rates usually exceed those on federal student loans—when they have exceeded their federal lending limit or do not qualify for a federal loan.

An important consideration in using private student loans to infer the cost of capital for federal loans is whether the risks of federal and private student loans are similar. Several factors suggest that private loans may be safer: Repayment is usually over a shorter period, and students with low credit scores are unlikely to be given loans. However, students who take out private loans tend to have higher levels of total indebtedness, which could reduce recovery amounts in cases of default. Private lenders also have the risk of adverse selection—students who are poor credit risks will be more inclined to try to borrow than students who are likely to repay. The federal programs are less susceptible to adverse selection because, by offering very favorable rates, they are more likely to attract safe borrowers as well as riskier ones. CBO assumed similar loss rates on federal and private loans on the basis of those offsetting considerations and limited data that suggest that historical loss rates from defaults have been broadly similar.[4]

The first step in adjusting for risk in CBO's fair-value calculations is to estimate what portion of the spread between the interest rate charged to borrowers on private loans and the rate on Treasury securities of comparable maturity represents the student loan risk premium—the compensation that private investors require to invest in student loans over and above expected losses from default.[5] Before the recent financial crisis, lenders typically charged borrowers variable interest rates on private

3. Administrative costs affect the interest rates that private lenders charge to borrowers because that is how lenders recover those costs. Administrative costs for FFEL and private lenders are likely to be similar, given that the large FFEL lenders also make private student loans. CBO used the interest rate charged on private loans, adjusted downward for the portion covering administrative costs and other factors, to infer the cost of risk.

4. That inference is based on confidential data provided to CBO by a private lender. There is no public source of data on default and recovery rates for private student loans.

5. Private student loans generally carry variable rates, whereas federal student loans carry fixed rates. Nevertheless, the spread between the rate charged on a private variable-rate loan and a short-term Treasury rate is a reasonable proxy for the premium that investors require for the default risk associated with federal student loans.

student loans that were about 4 percentage points higher than the London interbank offered rate, or Libor (a short-term rate that banks charge other high-quality banks to borrow). Conceptually, that spread includes compensation for expected default losses, administrative costs, and a risk premium. CBO attributes approximately 2 percentage points of the spread to administrative costs and losses from defaults, which leaves 2 percentage points as an estimate of the premium over Libor for private student loans in 2006, when credit conditions were relatively easy. At the time, Libor rates were about 0.3 percentage points over Treasury rates, implying a risk premium of 2.3 percentage points.

During the financial crisis, spreads on student loans widened sharply, and private loans became much harder to obtain. CBO recently collected information from a large lender about rate spreads on private student loans and the credit quality of borrowers. Adjusting for administrative costs, and taking into consideration the disrupted market conditions, CBO estimates that the fair-value risk premium on private student loans was about 4 percentage points over Treasury rates in early 2010.[6] CBO assumes that after 2013, the risk premium will gradually decline to a long-term level of 2.5 percentage points as market conditions return to normal and the economy improves.

FFEL lenders' net receipts reflect a combination of payments from borrowers, the federal government, and the capital markets in which the loans are funded. Considering the combined effect of those net payments suggests that some of the lenders' cash flows should be discounted at close to a short-term Treasury rate, whereas others are affected by default and prepayment risk and should be discounted at a higher rate that is based on the inferred risk premium on student loans. CBO takes those considerations into account in determining the fair-value discount rates for payments to FFEL lenders.[7]

Estimating Subsidy Rates

CBO computes fair-value subsidy rates for the direct and guaranteed loan programs by applying discount rates imputed from the cost of capital to the programs' various cash flows. In the direct loan program, the stream of borrowers' payments net of collection costs and some administrative costs is discounted at the Treasury rate plus a spread that varies from 1 percentage point to 6 percentage points depending on the default rate associated with the type of loan. The subsidy rate for the direct loan program is the present value of cash flows per dollar of loans, net of the amount disbursed and up-front fees. The components of the subsidy for a direct loan (assuming the risk profile of a typical loan made in the FFEL program) are shown in Table 4 on page 12.

To properly account for differences in the risk of different cash flows in the guaranteed loan program, CBO computes subsidy rates by considering two sets of cash flows whose difference equals the government's net cash flows. The first set is borrowers' payments of principal and interest to FFEL lenders. The second set is the net payments that lenders receive from borrowers and the federal government, which include special allowance payments, payments of default claims, and various fees.[8]

The first set of payments (from borrowers to lenders) is valued in the same way as for the direct loan program: by discounting expected cash flows using a Treasury rate plus a risk premium that is adjusted for the risk of the loan pool in question. The second set of payments (from borrowers and the government to lenders) generates a stream of variable payments that is indexed to a short-term commercial-paper rate, plus a fixed spread, plus the amounts recovered from the government if a loan defaults. CBO discounts the variable payments and principal payments at a rate that is only slightly above the rate

6. The reported rates charged on private loans in 2009 ranged from Libor+4 percentage points to Libor+13 percentage points, with an average of Libor+11 percentage points. CBO judged that the high average spread reflected not only the riskiness of borrowers but also the shortage of risk capital in the market; as a result, CBO based its estimate of the cost of capital on a below-average spread.

7. To discount the variable-rate payments included in lenders' special allowance payments under FCRA, CBO uses a Treasury rate that corresponds to the maturity of the underlying loans. Fair-value estimates discount the payments at a short-term rate because variable-rate liabilities are economically equivalent to short-term liabilities. The effect of using a long-term Treasury rate is typically to bias downward the present value of those payments relative to their fair value.

8. In this breakdown, any benefits to borrowers that are paid by the lender are excluded from the first set of cash flows and included in the second set. Certain payments to guaranty agencies and other federal administrative costs are omitted from this breakdown, but CBO took their contribution to the subsidy into account; that contribution is computed by applying discount rates that reflect the risk of those cash flows.

on short-term Treasury securities, because the value of those cash flows is largely unaffected by default risk. However, some components of a lender's cash flows, such as its share of credit losses and a portion of the fixed spread received, are more risky because they are sensitive to borrowers' defaults and prepayments. Consequently, those components are discounted at higher rates.

A large part of the stream of combined payments from the government and borrowers to FFEL lenders corresponds to what the lenders pay out in interest to holders of the student-loan-backed securities that they issue. Principal on such securities is redeemed as loans are repaid or default. Holders of the securities typically earn a variable interest rate (indexed to Libor) plus a spread. The spread has averaged about 0.2 percentage points under normal market conditions, but it widened to as much as 2 percentage points during the recent financial crisis. Equivalently, the rate is about 0.5 percentage points over the rate on short-term Treasury securities during normal times. That spread is difficult to understand given that the federal government bears most of the risk of loss associated with the securities and that the floating rate coupon helps insulate investors from price fluctuations. In its base-case estimates, CBO attributes about three-fifths of the normal spread over Treasury rates to a transfer of risk from the government to lenders. CBO judges that the remainder is attributable to a cost disadvantage for FFEL lenders resulting from counterparty risk, liquidity risk, and securitization inefficiency that are not present in the direct loan program.